

AMENDMENTS TO THE CLAIMS

1.(currently amended): A packet transferring apparatus which communicates between terminals belonging to networks comprising:

- a main processor for executing a routing process, a filtering process, and a priority control process,
- a first portion, ^{order} arranged at a subsequent stage of the main processor, ^{store, update delete} for determining whether or not a packet outputted from the main processor is conformable with a session establishment condition, and
- a second portion, ^{entry table, time stamp} arranged at a preceding stage of the main processor, for receiving and holding packet information from the first portion when the first portion determines that the packet is conformed and for providing a bypass of the main processor with subsequent packets belonging to a same session, based on the packet information.

2.(original): The packet transferring apparatus as claimed in claim 1 wherein the first portion comprises a session establishment managing table where the packet information and priority information are preset according to a network management policy, and a session establishment managing processor for retrieving the table to determine whether or not the packet is conformed with the session establishment condition.

3.(original): The packet transferring apparatus as claimed in claim 2 wherein the second portion comprises a session management table for dynamically holding the packet information relating to the same session provided by the session establishment managing processor, and

a session management processor for retrieving the session management table to provide the bypass with the subsequent packets of the same session.

4.(original): The packet transferring apparatus as claimed in claim 3 wherein when retrieving the session management table finds no conformed entry, the second portion inverts constituent information of each entry to repeat the retrieval.

a 1 5.(original): The packet transferring apparatus as claimed in claim 3 wherein when a communication form is the TCP communication, an establishment or closure of the session is performed with a code bit of a packet format.

6.(original): The packet transferring apparatus as claimed in claim 5 wherein the second portion uses an FIN of the code bit as a session closure flag, receives a packet in which the flag is set, closes the session when the session management processor further receives a subsequent reception response packet for closure, and deletes a conformed entry of the session management table.

7.(original): The packet transferring apparatus as claimed in claim 5 wherein the second portion uses an RST of the code bit as a session closure flag, closes the session after receiving a packet in which the flag is set, and deletes a conformed entry of the session management table.

8.(original): The packet transferring apparatus as claimed in claim 5 wherein without any transmission/reception of the packet for more than a predetermined time, the second portion closes the session and deletes a conformed entry of the session management table.

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9.(original): The packet transferring apparatus as claimed in claim 5 wherein when the communication form is the UDP communication, the session establishment managing table includes a UDP session establishment data table which holds bit patterns of a part of an application data portion following a UDP packet header, and the session establishment managing processor retrieves the session establishment managing table and the UDP session establishment data table to establish the session.

10.(original): The packet transferring apparatus as claimed in claim 9 wherein without any transmission/reception of the packet for more than a predetermined time, the second portion closes the session and deletes a conformed entry of the session management table.

11.(original): The packet transferring apparatus as claimed in claim 9 wherein a mask data table is attached to each of the tables.

12.(original): The packet transferring apparatus as claimed in claim 3 wherein the session management table attaches thereto indexes of a number of kinds required for each field value, and is composed of a combination of the indexes.
